PTO/SB/08a (08-03)
Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known

Application Number 10/766,131

Filing Date January 28, 2004

First Named Inventor Richard E. Perego

Art Unit Unknown

Examiner Name Unknown

Attorney Docket Number RAMB-01049US2

(Use as many sheets as necessary)

Sheet 1 of 4

			U.S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 5,953,215*	09-14-1999	Karabatsos	
***************************************		^{US-} 6,142,830*	11-07-2000	Looeffler	
		^{US-} 6,185,644 B1*	02-06-2001	Farmwald et al.	
		^{US-} 6,266,252 B1*	07-24-2001	Karabatsos	
		^{US-} 6,317,352 B1*	11-13-2001	Halbert et al.	
		^{US-} 6,414,904 B2*	07-02-2002	So et al.	
		^{US-} 6,446,158 B1*	09-03-2002	Karabatsos	
		us-6,493,250 B2*	12-10-2002	Halbert et al.	
		^{US-} 6,530,006 B1*	03-04-2003	Dodd et al.	
		^{US-} 6,643,752 B1*	11-04-2003	Donnelly et al.	
		^{US-} 6,449,679 B2*	09-10-2002	Ryan	
	-	^{US-} 6,108,731*	08-22-2000	Suzuki et al.	
		^{US-} 5,701,313*	12-23-1997	Purdham	***************************************
		^{US-} 5,068,650*	11-26-1991	Fernandez et al.	
144 maryan gara arayan sanaran ara-144.		us-4,947,257*	08-07-1990	Fernandez et al.	
		^{US-} 5,513,135*	04-30-1996	Dell et al.	
		^{US-} 6,065,092*	05-16-2000	Roy	
	1	^{US-} 6.185.644*	02-06-2001	Farmwald et al.	

	FOREIGN PATENT DOCUMENTS									
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ 'Number ⁴ 'Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶				

•••••••										
	4									

Examiner	 		Date		
Signature			Conside	red	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/F	PTO	Complete if Known				
		Application Number	10/766,131			
INFORMATIO	ON DISCLOSURE	Filing Date	January 28, 2004			
	BY APPLICANT	First Named Inventor	Richard E. Perego			
STATEMENT	DI ALI LIOANI	Art Unit	Unknown			
(Use as many	sheets as necessary)	Examiner Name	Unknown			
heet 2	of 4	Attorney Docket Number	RAMB-01049US2			

C. combons	Cite	Degument Number	U. S. PATENT Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Examiner Initials*	No.1	Document Number	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant
	1	Number-Kind Code ^{2 (fl known)}			Figures Appear
		^{US-} 5,034,917*	07-23-1991	Bland et al.	
		^{US-} 4,977,498*	12-11-1990	Rastegar et al.	
		US-			
		US-			
		US-			
		US-			
	 	US-			· · · · · · · · · · · · · · · · · · ·
		US-			
		US-			
		US-			
		US-			h and dibble deals he had been deputed by the second or
		us-			
		US-			
	-	US	-		
·	 	US-			
***************************************	<u> </u>	US-			
		US-			
	 	US-	, <u>, , , , , , , , , , , , , , , , , , </u>		

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ 'Number ⁴ 'Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶			
			••••••••••••••••••••••••••••••	•••••••••••••••••••••••••••••••••••	***************************************				
			***************************************	•	***************************************				
					•••••••••••••••••				

Examiner Signature		Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute	for form 1449B/PTO			Complete if Known		
				Application Number	10/766,131	
INFC	RMATION DI	SCLO	SURE	Filing Date	January 28, 2004	
STA	STATEMENT BY APPLICANT			First Named Inventor	Richard E. Perego	
				Art Unit	Unknown	
	(Use as many sheets as	s necessary,)	Examiner Name	Unknown	
Sheet	3	of	4	Attorney Docket Number	RAMB-01049US2	

		NON PATENT LITERATURE DOCUMENTS					
Examiner Cite No.1		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.					
		*Intel Developer Forum, "DDR2 Memory In 2004 Servers - Recipes For Successful Designs", September 2003					
		*QBM Alliance, Platform Conference, "Quad Band Memory (QBM tm): DDR 200/266/333 devices producing DDR400/533/667, Jan. 23-24, 2002					
		*KARABATSOS, C., "Quad Band Memory (QBM) Technology", Kentron Technologies, Inc., April 2001					
		*Quad Band Memory (QBM), "The 'QBM Enabled' VIA PT880/PM880 Chipset Solutions with the Fastest Memory",	**********				
		*WEBER, F., "The AMD Athlon Processor: Future Directions", AMD					
		*"Intel 82804AA Memory Repeater Hub for SDRAM (MRH-S) Datasheet", Intel Corp., pp. 2-48 (Nov. 1999)	***********				
	•	*"Intel 82805AA Memory Translater Hub (MTH) Datasheet", Intel Corp., pp. 1-48 (Nov. 1999)	**********				
}		*CATALDO, A., "TI Fields DSP-Based Media Processor on a DIMM", EE Times (Jan. 2000)					
•		*MAC WILLIAMS, P., "PC Memory Directions For 1999 and Beyond", Intel Developer Forum, pp. 1-10 (Sep. 1998)					
		*JOHNSON, B., "Direct RDRAM Basic Architecture and Program Overview", Intel Developer Forum, pp. 1-14 (Sep. 1998)					

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute	for form 1449B/PTO			Complete if Known		
				Application Number	10/766,131	
INFC	RMATION D	ISCLC	SURE	Filing Date	January 28, 2004	
STA	TEMENT BY	APPL	CANT	First Named Inventor	Perego	
				Art Unit	2188	
	(Use as many sheets a	as necessar))	Examiner Name		
Sheet	4	of	4	Attorney Docket Number	RAMB-01049US2	

	NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²				
		*JONES, F (United Memories, Inc.), "A new era of fast dynamic RAMs", IEEE Spectrum, October 1992, pp. 43-49					
		*FARMWALD, M. et al. (Rambus Inc.), "A fast path to one memory", IEEE Spectrum, October 1992, pp. 50-51					
***************************************		*GJESSING, S. (University of Oslo), GUSTAVSON, D.B (Stanford Linear Accelerator Center), JAMES, D. et al. (Apple Computer Inc.), WIGGER, H. (Hewlett-Packard Co.), "A RAM link for high speed", IEEE Spectrum, October 1992, pp. 52-53	•				
		*The Institute of Electrical and Electronics Engineering , Inc., "IEEE Standard for High-Bandwidth Memory Interface Based on Scalable Coherent Interface (SCI) Signaling Technology (RamLink)", 1996, pp. 1-91					
-	<u>.</u>		-				
	•••••						
			•				
	••••••						
	<u> </u>						

	l .	
Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO			Complete if Known		
				Application Number	10/766,131
INFO	RMATION DI	SCLO	SURE	Filing Date	January 28, 2004
STA	TEMENT BY	APPLI	CANT	First Named Inventor	Richard E. Perego
				Art Unit	Unknown
	(Use as many sheets as	necessary)	Examiner Name	Unknown
Sheet	4	of	4	Attorney Docket Number	RAMB-01049US2

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/cr country where published.	T²
		*GILLINGHAM, P., "SLDRAM Architectural and Functional Overview", SLDRAM Consortium, SLDRAM Inc., pp. 1-14 (Aug. 1997)	
		*"Draft Standard for a High-Speed Memory Interface (Synclink)", Draft 0.99 IEEE P1596.7-199X, IEEE Inc., pp. 1-51 (1996)	
		*WIGGERS, H., "SyncLink A Proposal for an Implementation of IEEE P1596.4", Hewlett Packard, pp. 1-20 (Mar. 1995)	
		*"KMM377S1620CT2 SDRAM Module Datasheet", Samsung Electronics Inc., pp. 1-2 (Nov. 1998)	
		*"SLD4M18DR400 4MEG x 18 SLDRAM Datasheet", SLDRAM Inc., pp. 1-69 (July 1998)	
	•••••••	*POULTON, J., "Signaling in High Performance Memory Systems", IEEE Solid State Circuits Conference, slides 1-59 (Feb. 1999)	
		*"SLDRAM 400Mb/s/pin Command/Address Repeater", SLD10400 Rev .5, SLDRAM Consortium, pp. 1-12 (Jan. 7, 1998)	
	***************************************	*Minutes of meeting no. 75 JEDEC JC-42.3 Committee on RAM Memories, and referenced attachment "Y" of the presentation titled "SyncLink", May 24, 1995, New Orleans	
		*Intel Developer Forum, "Fully Buffered DIMM (FB-DIMM) Server Memory Architecture: Capacity, Performance, Reliability, and Longevity", February 18, 2004	
		*Intel Developer Forum, "Fully Buffered DIMM (FB-DIMM) Design Considerations", February 18, 2004	

4		1	
ı	Examiner	Date	
ı	Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form

Sheet 1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known					
Application Number	10/766,131				
Filing Date	Jan. 28, 2004				
First Named Inventor	Perego				
Art Unit	Unknown				
Examiner Name	Unknown				
Attorney Docket Number	RAMB-010491192				

				DOCUMENTS	Daniel Onlinear Hanning
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ^{2 (# known)}			- I iguico i ippeai
		^{US-} 6,587,912 B2*	07-01-2003	Leddige et al.	
		US-			
	 	US-			***************************************
		US-			
		US-			
	 	US-			
		US-			
		US-			
	 	US-			
		US-			
		US-			
	•	US-			
		US-			100
	 	US-			
	<u> </u>	US-			
	\vdash	US-			

		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ "Number ⁴ "Kind Code ⁵ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	Τ°
						L

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. See Einds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. See Finds Codes of USPTO Patent Documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language results in the standard ST.16 if possible. Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/\$B/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
or the Paperwork Reduction and the company of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

RIBADENA	
INFORMATION	DISCLOSURE

STATEMENT BY APPLICANT

Complete if Known

Application Number 10/766,131

Filing Date January 28, 2004

First Named Inventor Perego

Art Unit Unknown

Examiner Name Unknown

(Use as many sheets as necessary)

Sheet 1 of 1 Attorney Docket Number RAMB-01049US2

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (d known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 6690726*	02-10-2004	Yavits et al.	
		^{US-} 5325493*	06-28-1994	Herrell et al.	
		^{US-} 5867180*	02-02-1999	Katayama et al.	
		^{US-} 6104417*	08-15-2000	Nielsen et al.	
		^{US-} 6208273*	03-27-2001	Dye et al.	
		US-			
		us-	***************************************	MINISTER ASSESSMENT AS	
		US-			
		us-			
		US-			
	 	US-			
		US-		-	
		US-			
		US-			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ 'Number ⁴ 'Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	τ⁵		
•								
	***********		•	***************************************	***************************************			
••••••••••	*********	•••••		***************************************	***************************************			
•••••	*********		***************************************	••••••••••••	***************************************			
*****************					***************************************			

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DNOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (08-03) Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paterwork Reduction Action 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/P Complete if Known Application Number 10/766,131 Filing Date INFORMATION DISCLOSURE January 28, 2004 First Named Inventor STATEMENT BY APPLICANT Richard E. Perego Art Unit 2188 (Use as many sheets as necessary) Examiner Name Unknown Attomey Docket Number RAMB-01049US2 Sheet 1

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		*JEDDELOH, JOE, "Fully Buffered DIMM (FB-DIMM)", Advanced Systems Technology, Micron Technology, Inc. April 15-16, 2004	
	•		
Examiner		Date	•

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Signature

Considered

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08a (08-03)

Approved for use through 07/31/2006. OMB 0651-0031 MAY 1 0 2006 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitution form 1449 A.T.	
INFORMATION DIS	CLOSURE
STATEMENT BY A	PPI ICANT

Complete if Known Application Number 10/766,131 Filing Date January 28, 2004 First Named Inventor Perego Art Unit 2188 **Examiner Name**

(Use as many sheets as necessary)

Attorney Docket Number RAMB-01049US2 Sheet 1

Examiner Initials*	Cite No.1	Document Number Number-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 5883839*	03-16-1999	Tosaka et al.	
		US-	<u> </u>		***************************************
		US-			
		US-			
		US-	W-18-74		
	ļ	US-			
	 	US-			
		US-			
		US-			***************************************
		US-			
		US-			
	<u> </u>	US-	Marie		
		US-			
		US-			
· · · · · · · · · · · · · · · · · · ·		US-		14	
		US-			
		US-			
	 	us			

		FOREIGN P	ATENT DOCL	IMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ 'Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
	1					
***************************************				***************************************	***************************************	

			***************************************	***************************************	**************************************	

Examiner		Date	
Signature		Considered	
-	I control of the cont		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the senal number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

MAY 1 0 2006 \$1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Under the P

A SOUTH SEL Complete if Known Substitute for form 144 Application Number 10/766,131 Filing Date INFORMATION DISCLOSURE January 28, 2004 STATEMENT BY APPLICANT First Named Inventor Perego Art Unit 2188 (Use as many sheets as necessary) Examiner Name Attorney Docket Number Sheet of RAMB-01049US2

	NON PATENT LITERATURE DOCUMENTS	
Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	*IEEE Standard for Scalable Coherent Interface (SCI), "Microprocessor and Microcomputer Standards Subcommittee of the IEEE Computer Society", IEEE Std 1596-1992	
	*SCI, *P1596: SCI, A Scalable Coherent Interface*, November 28, 1988	
**************	*GUSTAVSON et al., DRAFT "The Scalable Coherent Interface Project (SuperBus)", SCI, August 22, 1988, Rev. 14	
	*SCHANKE, "Proposal for Clock Distribution in SCI", SCI, May 5, 1989	
	*JAMES, "Scalable I/O Architecture for Buses", COMPCON Spring 1989, SCI, November 28, 1988	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	*VOLZ et al., "Position Paper On Global Clock For the Futurebus +", SCI, 1989	
	*KRISTIANSEN et al., "Scalable Coherent Interface", to appear in Eurobus Conference Proceedings, May 1989	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		Cite No.1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. *IEEE Standard for Scalable Coherent Interface (SCI), "Microprocessor and Microcomputer Standards Subcommittee of the IEEE Computer Society", IEEE Std 1596-1992 *SCI, "P1596: SCI, A Scalable Coherent Interface", November 28, 1988 *GUSTAVSON et al., DRAFT "The Scalable Coherent Interface Project (SuperBus)", SCI, August 22, 1988, Rev. 14 *SCHANKE, "Proposal for Clock Distribution in SCI", SCI, May 5, 1989 *JAMES, "Scalable I/O Architecture for Buses", COMPCON Spring 1989, SCI, November 28, 1988 *VOLZ et al., "Position Paper On Global Clock For the Futurebus +", SCI, 1989

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08a (08-03)

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Approved for use through 07/31/2006. OMB 0651-0031 lection of information unless it contains a valid OMB control number. 1995, no persons are required to respond Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number 10/766,131 Filing Date January 28, 2004 First Named Inventor Perego Art Unit 2188 **Examiner Name**

(Use as many sheets as necessary)

Attorney Docket Number RAMB-01049US2 Sheet 1

	Cit-	Danisa at North an	U. S. PATENT D Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Examiner nitials*	Cite No.1	Document Number	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant
nitials	IVO.	2 (# known)	WW-DD-1111	Applicant of oned boddinent	Figures Appear
		Number-Kind Code ^{2 (if known)}			- Igares Appear
		US-			
		US-			
		US-			
	 	US-			
		US-			the state of the s
		US-			
····		US-	<u> </u>		
		US-			
		US-			
		US-	***************************************		
		US-			
		US-			
		US-			A SULL STATE OF
		US-	**************************************		
		US-			

		FOREIG	N PATENT DOCU	JMENTS		
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ 'Number ⁴ 'Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		EP 0 811 916 A2*	12/10/1997	The Boeing		
•••••		WO 99/30240*	06-17-1999	Intel Corporation		
••••••	1	WO 99/41666*	08-19-1999	Intel Corporation		
••••••	1	WO 99/41667*	08-19-1999	Intel Corporation		
•••••••	†	EP 1069509 A2*	01-17-2001	Texas Instruments		

Examiner Signature	Date Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute f	for form 1449B/PTO				Complete if Known
				Application Number	10/766,131
INFO	RMATION	DISCLO	SURE	Filing Date	January 28, 2004
STA	TEMENT E	3Y APPL	ICANT	First Named Inventor	Perego
				Art Unit	2188
	(Use as many sh	eets as necessar	y)	Examiner Name	
Sheet	2	of	2	Attorney Docket Number	RAMB-01049US2

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
		*PCT International Search Report (June 27, 2001) 4 pages	
***************************************		*Microsoft Press Computer Dictionary, 3rd Ed., 1997, pp. 48 and 68	·
••••••	••••••	*GUSTAVSON et al., "Macintosh HD:Desktop Folder:SLDRAMrepeaterConcerns", Sunday, November 23, 1997, 4 pages	

÷			

		Date	<u> </u>

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08a (08-03)

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Approved for use through 07/31/2006. OMB 0651-0031 MAY 1 0 2006 no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number 10/766,131 Filing Date January 28, 2004 First Named Inventor Perego Art Unit 2188 **Examiner Name**

(Use as many sheets as necessary)

PTRACE

Substitute for

Attorney Docket Number RAMB-01049US2 Sheet 1 4

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (d known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 5742840*	04-21-1998	Hansen et al.	
		^{US-} 5748872*	05-05-1998	Norman	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<u> </u>	US-5860080*	01-12-1999	James et al.	
	<u> </u>	^{US-} 5867422*	02-02-1999	John	
		^{US-} 5898863*	04-27-1999	Ofer et al.	
		^{US-} 6006318*	12-21-1999	Hansen et al.	
		^{US-} 6034878*	03-07-2000	Osaka et al.	
		us-6038682*	03-14-2000	Norman	
		^{US-} 6092229*	07-18-2000	Boyle et al.	
		^{US-} 6125419*	09-26-2000	Umemura et al.	
		^{US-} 6151648*	11-21-2000	Haq	
and the same and the same of t		^{US-} 6154826*	11-28-2000	Wulf et al.	
		^{US-} 6160423*	12-12-2000	Haq	
		US-6255859*	07-03-2001	Haq	
		US-6263413*	07-17-2001	Motomura et al.	
		US-6327205*	12-04-2001	Haq	
		^{US-} 6408402*	06-18-2002	Norman	
		^{US-} 6487102*	11-26-2002	Halbert et al.	

	FOREIGN PATENT DOCUMENTS							
Examiner Cite No.1		Foreign Patent Document Country Code ³ (Number ⁴ (Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶		
••••••				***************************************				
***************			***************************************	***************************************	***************************************			
	4			•••••••••••••••••••••••••••••••••••••••	***************************************			
	•••••			••••••	[

Examiner	Date	
Signature	Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

	r the Paperwork Reduction Act of 1995. bstitute for form 1449A/PTO	no pe	rsons are required to re		on unless it contains a valid OMB control number. mplete if Known
Ju	ballate for form 1443/VI TO			Application Number	10/766,131
II	NFORMATION DISC	CLC	SURE	Filing Date	January 28, 2004
	TATEMENT BY AP			First Named Inventor	Perego
	TAILMLM DI A	. –	IOAIII	Art Unit	2188
	(Use as many sheets as ned	cessar	<i>(</i>)	Examiner Name	
Sheet	2	of	4	Attorney Docket Number	RAMB-01049US2

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		^{US-} 6502161*	12-31-2002	Perego et al.	
		^{US-} 6513080*	01-28-2003	Haq	
		^{US-} 6154855*	11-28-2000	Norman	
		^{US-} 6345321*	02-05-2002	Litaize et al.	
		^{US-} 6369605*	04-09-2002	Bonella et al.	
		^{US-} 6449213*	09-10-2002	Dodd et a.	
		^{US-} 6625687*	09-23-2003	Halbert et al.	
		US-			
The state of the s		US-			
		US-			
		US-		The state of the s	
	1	US-			
·		US-			
		US-			
		US-			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ 'Number ⁴ 'Kind Code ⁵ (# known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶		
		***************************************			*42************************************			
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			-1	L		
					······	╞		
				<u> </u>		F		

Examiner Signature	1 -	Date Considered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute for form 1449B/PTO		Complete if Known	
	Application Number	10/766,131	
INFORMATION DISCLOSU	RE Filing Date	January 28, 2004	
STATEMENT BY APPLICA	NT First Named Inventor	Perego	
	Art Unit	2188	
(Use as many sheets as necessary)	Examiner Name		
Sheet 3 of 4	Attorney Docket Number	RAMB-01049US2	フ

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials* Cite No.1 Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²			
		*U.S. Patent Application Serial No. 10/713,868, filed 11-14-2003 by Pete D. Vogt			
		*U.S. Patent Application Serial No. 10/714,025, filed 11-14-2003 by Pete D. Vogt			
		*U.S. Patent Application Serial No. 10/714,026, filed 11-14-2003 by Pete D. Vogt			
		*U.S. Patent Application Serial No. 10/883,474, filed 06-30-2004 by Pete D. Vogt			
		*U.S. Patent Application Serial No. 10/882,999, filed 06-30-2004 by Pete D. Vogt			
		*U.S. Patent Application Serial No. 10/859,438, filed 05-31-2004 by Pete D. Vogt			
		*U.S. Patent Application Serial No. 10/858,850, filed 05-31-2004 by Pete D. Vogt			
		*U.S. Patent Application Serial No. 10/859,060, filed 05-31-2004 by Pete D. Vogt			
		*NG, R. (Sun Microsystems Inc.), "Fast computer memories", IEEE Spectum, October 1992, pp. 36-39			
		*SALTERS, R.H.W. (Philips Research Laboratories), "Fast DRAMS for sharper TV", IEEE Spectrum, October 1992, pp. 40-42			

		1	T
1			
	Examiner	Date	
ı	Signature	Considered]

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Substitute t	for form 1449B/PTO		Complete if Known		
			Application Number	10/766,131	
INFO	RMATION D	ISCLOSURE	Filing Date	January 28, 2004	
STATEMENT BY APPLICANT			First Named Inventor	Perego	
			Art Unit	2188	
	(Use as many sheets a	s necessary)	Examiner Name		
Sheet	4	of 4	Attorney Docket Number	RAMB-01049US2	

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		*JONES, F (United Memories, Inc.), "A new era of fast dynamic RAMs", IEEE Spectrum, October 1992, pp. 43-49	
	•	*FARMWALD, M. et al. (Rambus Inc.), "A fast path to one memory", IEEE Spectrum, October 1992, pp. 50-51	
		*GJESSING, S. (University of Oslo), GUSTAVSON, D.B (Stanford Linear Accelerator Center), JAMES, D. et al. (Apple Computer Inc.), WIGGER, H. (Hewlett-Packard Co.), "A RAM link for high speed", IEEE Spectrum, October 1992, pp. 52-53	
***************************************	••••••	*The Institute of Electrical and Electronics Engineering , Inc., "IEEE Standard for High-Bandwidth Memory Interface Based on Scalable Coherent Interface (SCI) Signaling Technology (RamLink)", 1996, pp. 1-91	
•••••	•		
***************************************	•••••		

·			
	l		<u></u>

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08a (07-05)

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Approved for use through 07/31/2006. OMB 0651-0031 persons are required to respond to a collection of information unless it contains a valid OMB control number Complete if Known Substitute for form

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number 10/766,131 Filing Date January 28, 2004 First Named Inventor Perego Art Unit 2188 **Examiner Name**

(Use as many sheets as necessary)

Attorney Docket Number RAMB-01049US2 Sheet 1

Examiner	Cite	Document Number	Publication Date	Name of Patentee or	Pages, Columns, Lines, Where
Initials*	No. ¹	Number-Kind Code ^{2 (if known)}	MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
		^{US-} 6425064 B2*	07-23-2002	Soderquist	
,, .,		US-4621339*	11-04-1986	Wagner et al.	
		US-4747070*	05-24-1988	Trottier et al.	
	·	US-4858107*	08-15-1989	Fedele	
		us-5602780*	02-11-1997	Diem et al.	
		US-5642444*	06-24-1997	Mostafavi	
		US-5838985*	11-17-1998	Ohki	
		us-6708248*	03-16-2004	Garrett, Jr., et al.	
		US-5982238*	11-09-1999	Soderquist	
		us-6639820 B1	10-28-2003	Khandekar et al.	
		us-6820163 B1	11-16-2004	McCall et al.	to delicate the data to be to
······································		^{US-} 6553450 B1	04-22-2003	Dodd et al.	
and the second s		^{US-} 6510503	01-21-2003	Gillingham et al.	
		US-			and the second s
		US-			A Anna Market and Allandar Control of the Control o
		US-			
		US-			
, and		US-			

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No.1	Foreign Patent Document Country Code ³ 'Number ⁴ 'Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁵			
		EP 0 282 070 B1*	08-03-1994	Fujitsu Limited					
••••••									

******************************	************								

Examiner	Date	
Signature	Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitut	te for form 1449B/PTO			Complete if Known			
				Application Number	10/766,131		
INF	ORMATION	DISCLO	SURE	Filing Date	January 28, 2004		
STA	ATEMENT B	Y APPL	ICANT	First Named Inventor	Perego		
				Art Unit	2188		
	(Use as many shee	ets as necessar	v)	Examiner Name			
Sheet	2	of	2	Attorney Docket Number	RAMB-01049US2		

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Ţ²		
		JEDEC Standard No. 21-C, Pages 4.20.4-1 through 4.20.4-69, 4.20.4-184 PIN, PC1600/2100 DDR SDRAM REGISTERED DIMM DESIGN SPECIFICATIONM, Revision 1.2			
•••••		MICRON, 240-Pin 256MB, 512MB, 1GB DDR2 SDRAM FBDIMM (SR, FB x72) Features, Micron Technology, Inc., 2004, pp. 1-36			

•••••••••••	***************************************				
***************************************	••••••				
Examiner	<u> </u>	Date			

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (08-03) Approved for use through 06/30/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

RAMB-01049US2

Under the Palegoverk Reduction Act 20095, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 14498 Complete if Known Application Number 10/766,131 Filing Date INFORMATION DISCLOSURE January 28, 2004 First Named Inventor STATEMENT BY APPLICANT Perego Art Unit 2188 (Use as many sheets as necessary) Examiner Name

Attorney Docket Number

Sheet

NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²			
		MICRON, 256MB, 512MB, 1GB: (x72, ECC, DR) 168-Pin SDRAM RDIMM, Synchronous DRAM Module, Micron Technology, Inc., 2001, pp. 1-28				

		<u></u>	*******			

Examiner Signature		Date Considered				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08a (07-05)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE spond to a collection of information unless it contains a valid OMB control number. Substitute for form 494/07 Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number 10/766,131 January 28, 2004 Filing Date First Named Inventor Perego Art Unit 2188 **Examiner Name**

(Use as many sheets as necessary)

Attorney Docket Number | RAMB-01049US2 Sheet |1

			U. S. PATENT		
Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ^{2 (# known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		us-5926839*	07/20/1999	Katayama	
		^{US-} 6272609 B1*	08/07/2001	Jeddeloh	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
		us-6292877 B1*	09/18/2001	Ryan	
	<u> </u>	^{US-} 6449703 B2*	09/10/2002	Jeddeloh	
	-	us-6480927 B2*	11/12/2002	Bauman	
		^{US-} 6604180 B2*	08/05/2003	Jeddeloh	
	†	^{US-} 6622224 B1*	09/16/2003	Cloud	
		us-2001/0039606A1*	11/08/2001	Jeddeloh	
	†	us-2002/0184462A1*	12/05/2002	Jeddeloh	
	İ	us-6477592 B1*	11/05/2002	Chen et al.	
		US-			
		US-			
······································		US-			
		US-			

	FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ 'Number ⁴ 'Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T⁵			

			,		**************************************				

Examiner	Date	ate		
Signature	Cor	onsidered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the senal number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/08b (08-03)

Approved for use through 06/30/2006. OMB 0651-0031

MAY 1 0 2006 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE 195, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Under the Paperwork Reduction Act of

Substitute for form 14 98 PRODE

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number 10/766,131 Filing Date January 28, 2004 First Named Inventor Perego Art Unit 2188 Examiner Name

Complete if Known

(Use as many sheets as necessary) Sheet Attorney Docket Number RAMB-01049US2

	NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*						
		LIZY KURIAN JOHN, "VaWiRAM: A Variable Width Random Access Memory Module", 9th International Conference on VLSI Design, January 1996, pp. 219-224, 1995 IEEE				

	*************		***************************************			
	••••••					
<u> </u>		· · · · · · · · · · · · · · · · · · ·				

Examiner Signature		Date Considered				

Examiner	Date	
Signature	Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18 Stylesheet Version v18.0

Title of Invention

CONFIGURABLE WIDTH BUFFERED MODULE

Application Number:

10/766131

10/766131

Confirmation Number:

3149

First Named Applicant:

Richard Perego

Attorney Docket Number: RAMB-01049US2

2188

Search string:

Art Unit:

(5513377 or 6526469 or 6185654 or 6530033 or 5228132).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	5513377 *	1996-04-30	Capowski et al.			
	2	6526469 *	2003-02-25	Drehmel et al.			
	3	6185654 *	2001-02-06	Van Doren			
	4	6530033 *	2003-03-04	Raynham et al.			
	5	5228132 *	1993-07-13	Neal et al.			

Signature

Examiner Name	Date

ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18 Stylesheet Version v18.0

> Title of Invention

CONFIGURABLE WIDTH BUFFERED MODULE

Application Number:

10/766131

10/766131

Confirmation Number:

3149

First Named Applicant:

Richard Perego Attorney Docket Number: RAMB-01049US2

Art Unit:

2188

Search string:

(6330687 or 5371880 or 5475818 or 5400360 or 4631666 or 5655113 or 5511224 or 5574945 or 5917760 or 6016282 or 6449727 or 4644532 or 4667305 or 4747100 or 4864563 or 5228134 or 5355467 or 5408646 or 5537394 or 5544342 or 5553266 or 5557266 or 5604735 or 5630095 or 5659710 or 5787083 or 5802054 or 5802565 or 5805798 or 5848145 or 5884036 or 5893921 or 5900017 or 5901294 or 5911052 or

5913044 or 5923893 or 6247100 or 20040095838 or 20040260991 or 20040250181 or 20040250153 or 20040150024 or 20040246786 or 20040246785 or 20040246767 or 20040015650 or 20030177313 or

20020083287).pn.

US Patent Documents

Note: Applicant is not required to submit a paper copy of cited US Patent Documents

init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass
	1	6330687 *	2001-12-11	Griffith			
	2	5371880 *	1994-12-06	Bhattacharya			
	3	5475818 *	1995-12-12	Molyneaux et al.			
	4	5400360 *	1995-03-21	Richards et al.			
	5	4631666 *	1986-12-23	Harris et al.			
	6	5655113 *	1997-08-05	Leung et al.	i		
	7	5511224 *	1996-04-23	Tran et al.			
	8	5574945 *	1996-11-12	Elko et al.			
	9	5917760 *	1999-06-29	Millar			
	10	6016282 *	2000-01-18	Keeth			

	11	6449727 *	2002-09-10	Toda
	12	4644532 *	1987-02-17	George et al.
	13	4667305 *	1987-05-19	Dill et al.
	14	4747100 *	1988-05-24	Roach et al.
	15	4864563 *	1989-09-05	Pavey et al.
	16	5228134 *	1993-07-13	MacWilliams et al.
	17	5355467 *	1994-10-11	MacWilliams et al.
	18	5408646 *	1995-04-18	Olnowich et al.
	19	5537394 *	1996-07-16	Abe et al.
	20	5544342 *	1996-08-06	Dean
	21	5553266 *	1996-09-03	Metzger et al.
	22	5557266 *	1996-09-17	Calvignac et al.
	23	5604735 *	1997-02-18	Levinson et al.
	24	5630095 *	1997-05-13	Snyder
	25	5659710 *	1997-08-19	Sherman et al.
	26	5787083 *	1998-07-28	lwamoto et al.
	27	5802054 *	1998-09-01	Bellenger
	28	5802565 *	1998-09-01	McBride
-	29	5805798 *	1998-09-08	Kearns et al.
	30	5848145 *	1998-12-08	Gallagher et al.
	31	5884036 *	1999-03-16	Haley
	32	5893921 *	1999-04-13	Bucher et al.
	33	5900017 *	1999-05-04	Genduso et al.
	34	5901294 *	1999-05-04	Tran et al.
	35	5911052 *	1999-06-08	Singhal et al.
	36	5913044 *	1999-06-15	Tran et al.
	37	5923893 *	1999-07-13	Moyer et al.
	38	6247100 *	2001-06-12	Drehmel et al.

US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
	1	20040095838	2004-05-20	Li]		
	2	20040260991	2004-12-23	Vogt et al.]		
	3	20040250181	2004-12-09	Vogt et al.]		
	<u> </u>				7		

	4	20040250153 *	2004-12-09	Vogt
	5	20040150024 *	2004-12-09	Vogt
	6	20040246786 *	2004-12-09	Vogt
	7	20040246785 *	2004-12-09	Vogt
	8	20040246767 *	2004-12-09	Vogt
	9	20040015650 *	2004-01-22	Zumkehr et al.
	10	20030177313 *	2003-09-18	lyer et al.
	11	20020083287 *	2002-06-27	Zumkehr et al.

Remarks

Note: Remarks are not for responding to an office action.

An Information Disclosure Statement containing 5 Foreign Patent Document and 3 Non Patent Literature Documents is being filed concurrently, via US mail. A fee for both Information Disclosure Statements is included with this submission.

Signature

Examiner Name	Date